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BANNER & WITCOFF, LTD.  
ATTORNEYS FOR CLIENT NOS. 003797 & 013797  
1100 13th STREET, N.W.  
SUITE 1200  
WASHINGTON, DC 20005-4051

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| EXAMINER |
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NGUYEN, KEVIN M

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2629

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                   |  |
|------------------------------|--------------------------------------|-----------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/786,041 | <b>Applicant(s)</b><br>KONG, YUAN |  |
|                              | <b>Examiner</b><br>Kevin M. Nguyen   | <b>Art Unit</b><br>2629           |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-13 and 37-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-13 and 37-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### ***Response to Arguments***

Response to applicant's amendment/argument filed on 6/21/2007, claims 1 and 37-52 are amended. Thus, claims 1-6, 8-13, and 37-52 are pending. Applicant's arguments see pages 7-8, with respect to the amended claims 1-6, 8-13, and 37-52 have been fully considered and are not persuasive. The rejection of claims 1-6, 8-13, and 37-52 are maintained.

With respect of applicant's arguments with respect to claims 1-6 and 8-13 concerning the Wang reference found on page 7, these are not found to be persuasive, because Wang further teaches the fifth embodiment read on these limitations, which recited in claims 1-6 and 8-13 as set forth in paragraph 2 below.

With respect of applicant's argument with respect to new claims 37-52 found on page 8, these are not found to be persuasive, because the amendment necessitated a new of ground(s) of rejection of new Nakano reference as set forth below.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-6 and 8-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Wang (US 5,771,038).

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2. As to claim 1, a pointing device configured to communicate with navigation software running on a computer having a display, the pointing device comprising: (Wang teaches a fifth embodiment of figure 13)

a sensor configured to sense a physical input, the pointing device configured to request the navigation software to move a navigation control on the display in accordance with the physical input; and *(Wang teaches a touch panel 122 as the sensor touches by a physical arm, and navigates/manipulates a movement of a cursor running by the operating system 11 being displayed on the screen monitor, fig. 13)*

a selector having a first state and a second state, the pointing device configured to request the navigation software to move the navigation control in accordance with a first navigation mode or a second navigation mode depending upon the state of the selector, *(Wang teaches the touch panel 122 or the touch panel 123 are selected by the operator as the modes; the touch panel 122 determines one kind of display state change, e.g., the movement of the cursor in the Z-direction on the monitor. On the other hand, the touch panel 123 determines another kind of display change, e.g., the brightness change of the picture)*

wherein the first navigation mode the navigation control moves at a first sensitivity in accordance with the physical input, and in the second navigation mode the navigation control moves at a second different sensitivity in accordance with the same physical input. *(Wang teaches a first display state mode, the cursor moves at a first sensitive touch display panel 122, and in the second display*

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*state mode, the cursor moves at a second touch display panel 123 with the same kind of the touch panel being touched by the physical arm of the entire control device. The touch panel 122 or the touch panel 123 are controlled by different resistance values generated at different locations between the two side, col. 7, lines 24-30, and 36-44).*

As to claim 2, Wang teaches a kit, comprising: the pointing device of claim 1; and a computer-readable medium storing computer-executable instructions representing the navigation software (a computer software a firmware has a code storing in EEROM and executed by the computer 15, col. 5, lines 13-15).

As to claim 3, Wang teaches the kit of claim 2, wherein the navigation software includes a first navigation engine and a second navigation engine, the first navigation mode utilizing the first navigation engine and the second navigation mode utilizing the second navigation engine (*elements 124 and 125, col. 7, lines 23-30*).

As to claim 4, Wang teaches the pointing device of claim 1, further including a Left click button and a Right click button in addition to the selector (a Left click button and a Right click button of the computer mouse 21, fig. 13).

As to claim 5, Wang teaches the pointing device of claim 1, wherein the selector has different physical positions each representing a different one of the first and second states (*the touch panel 122 or the touch panel 123 provide two different control display states, col. 7, lines 23-44*).

As to claim 6, Wang teaches the pointing device of claim 1, wherein the selector is an angular sensor configured to sense an angle of the pointing device (*the finger is*

*pivoted in different directions associated with different angles when touch on the touch panel 122 or 123, fig. 13).*

As to claim 8, Wang teaches the pointing device of claim 1, wherein the physical input is movement of the pointing device, and wherein in the first navigation mode the navigation control moves by an amount that has a first relationship with the movement of the pointing device, and in the second navigation mode the navigation control moves by an amount that has a second different relationship with the movement of the pointing device. *(the first larger muscle group of a first display state mode, the cursor relatively moves at a first sensitive touch display panel 122, and in the second larger muscle group of the second display state mode, the cursor relatively moves at a second touch display panel 123 with the same kind of the touch panel being touched by the physical arm of the entire control device. The touch panel 122 or the touch panel 123 are relatively controlled by different resistance values generated at different locations between the two side, col. 7, lines 24-30, and 36-44).*

As to claim 9, Wang teaches the pointing device of claim 8, wherein the navigation control moves linearly in accordance with the movement of the pointing device in both the first and second navigation modes *(a cursor is moved linearly in x and y directions, col. 4, lines 58-67).*

As to claim 10, Wang teaches the pointing device of claim 1, wherein the pointing device is configured to move upon a surface, the selector being responsive to an amount of pressure applied to the pointing device against the surface *(the touch panel 122 or the touch panel 123 are selected by the operator).*

As to claim 12, Wang teaches the pointing device of claim 1, wherein the pointing device is not integrated with a keyboard having an alphanumeric section (*the touch panel 122 is stand-alone separated from a keyboard*).

As to claim 13, Wang teaches the pointing device of claim 1, wherein the navigation control is a cursor (*the cursor being displayed on the monitor, col. 4, lines 50-52*).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 37-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakano et al (US 7,239,305) hereinafter Nakano.

As to **claim 37, an apparatus, comprising:** (Nakano teaches a touch panel 4, fig. 2)

**a sensor configured to sense a physical input, the apparatus configured to control two-dimensional movement of displayed a navigation control in accordance with the physical input** (*Nakano teaches a touch panel 4 touches by a physical arm, and navigates/manipulates a movement of a cursor/marker 21 in a*

*graphic interface provided in software application running being displayed on the screen monitor 4a, figs. 2 and 4); and*

**a selector having a first state and a second state, the apparatus configured to control the two-dimensional movement of the displayed navigation control at either a first sensitivity or a second sensitivity depending upon whether the selector is in a first state or a second state** *(a user pushes an input mode switching key 6 for determining the movement of the cursor 21 on the display 4a whether a first display state or a second display state being selected; a first operation mode, the cursor 21 moves at a first sensitive touch display 4a (before touching), and in the second operation mode, the cursor 21 moves at a second touch display 4a (after touching) with the same of the touch panel 4 being touched by a physical arm, figs. 2 and 5, col. 7, line 58 to col. 8, line 47, col. 9, line 54 to col. 10, line 33, and col. 10, line 64 to col. 11, line 4).*

As to claim 38, the apparatus of claim 37, further including a Left click button and a Right click button in addition to the selector (Nakano further additionally has a Left click button and a Right click button in fig. 12).

As to claim 39, the apparatus of claim 37, wherein the selector has different physical positions each representing a different one of the first and second states (Nakano further has before and after the input modes switching key in fig. 12).

As to claim 40, the apparatus of claim 37, wherein the selector is an angular sensor configured to sense an angle of the pointing device, and wherein the first state is associated with a first angle of the apparatus and the second state is associated with a



second angle of the apparatus (Nakano further has *a user is tilted a pen 20 at a first angle for the input mode switching key 6 for determining the movement of the cursor 21 on the display 4a; and the user is tilted the pen 20 at a second angle for the input mode switching key 6 for determining the different movement of the cursor 21 on the display 4a , figs. 2 and 5, col. 7, line 58 to col. 8, line 47, col. 9, line 54 to col. 10, line 33, and col. 10, line 64 to col. 11, line 4).*

As to claim 41, the apparatus of claim 37, wherein the physical input is translation of the apparatus. (Nakano has the hand to hold the pen 20-being moved by the physical input-as a translation of the pointing device 4).

As to claim 42, the apparatus of claim 37, wherein the apparatus is configured to translate upon a surface, the selector being responsive to pressure applied to the apparatus against the surface, the selector configured to be in either the first state or the second state depending upon an amount of the pressure (Nakano has the touch panel 4 is performed to touch by the pressure against the surface thereof).

As to claim 43, the apparatus of claim 37, wherein the displayed navigation control is a displayed cursor (Nakano has the cursor 21).

**As to claim 45, an apparatus configured to communicate with navigation software running on a computer having a display, the pointing device comprising:** (Nakano teaches a touch panel 4, OS 11, and a display 5, fig. 2)

**a selector configured to switch between a first state and a second state responsive to a first physical input; and** *(the user pushes an input mode switching key 6 for selecting whether a first display state or a second display state with respect to*

*the first physical input); a first operation mode, the cursor 21 moves at a first sensitive touch display 4a (before touching), and*

a sensor coupled to the selector and configured to sense a second physical input, the pointing device configured to request the navigation software to translate a navigation control across the display at a first sensitivity in accordance with the second physical input while the selector is in the first state, and to request the navigation software to translate the navigation control across the display at a second sensitivity in accordance with the second physical input while the selector is in the second state. *(a touch sensor connected to the switching key 6 and controls the second operation mode in which the cursor 21 moves at a second touch display 4a (after touching) to request the operating system 11 and the CPU 1 to translate the cursor 21 across the display 4a after touching in accordance the second physical input, figs. 2 and 5, col. 7, line 58 to col. 8, line 47, col. 9, line 54 to col. 10, line 33, and col. 10, line 64 to col. 11, line 4).*

Claim 46 shares the same limitations as those of claim 38 and therefore the rationale for rejection will be the same.

Claim 47 shares the same limitations as those of claim 39 and therefore the rationale for rejection will be the same.

Claim 48 shares the same limitations as those of claim 40 and therefore the rationale for rejection will be the same.

Claim 49 shares the same limitations as those of claim 41 and therefore the rationale for rejection will be the same.

Claim 50 shares the same limitations as those of claim 42 and therefore the rationale for rejection will be the same.

Claim 52 shares the same limitations as those of claim 44 and therefore the rationale for rejection will be the same.

4. Claims 43 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano in view of Griffin et al (US 6,842,169) hereinafter Griffin.

Nakano teaches all of the claimed limitation of claims 37 and 45, except for wherein the selector is a scroll wheel rotatable around a first axis and tilt-able around a second axis, the first and second states being selected by a tilt of the scroll wheel.

However, Griffin teaches a thumbwheel input device oriented on an incline and comprising a wheel such that a first input is generated by rotation of the wheel about its axis, and a holder also having an axis of rotation and a portion thereon to receive the wheel whereby a second input is generated by rotation of the holder about the second axis, abstract.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Nakano to have the tilt wheel as taught by Griffin because this would provide auxiliary input device such as multiple input mode thumbwheels (col. 1, lines 8-11 of Griffin).

#### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Nguyen whose telephone number is 571-272-7697. The examiner can normally be reached on MON-THU from 9:00-6:00.

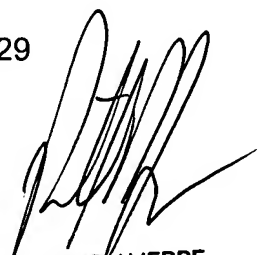
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KMN  
August 21, 2007

*/Kevin M. Nguyen/*  
KEVIN M. NGUYEN  
Examiner  
Art Unit 2629



RICHARD HJERPE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600